

DESCRIPTION OF RHYSSOLEPTONETA LATITARSA GEN. NOV. ET SP. NOV. (ARANEAE, LEPTONETIDAE) FROM HEBEI PROVINCE, CHINA

TONG Yair Feng^{1, 2}, LI Shur Qiang^{1*}

1. Institute of Zoology, Chinese Academy of Sciences, Beijing 100080, China

2. Graduate School of Chinese Academy of Sciences, Beijing 100039, China

Abstract A new genus, *Rhyssoleoneta* gen. nov., is proposed for the species *R. latitarsa* sp. nov., which was collected in leaf litter. The new genus can be distinguished from other genera by the shape of male palpal tarsus, which is relatively wider, with a small projection on its dorsal surface, and by the complicated structure of male palpal bulb.

Key words Spiders, taxonomy, new genus, China.

Leptonetidae are small (1.0–3.0 mm), three clawed, haplogyne spiders, characterized by a distinctive 6-eyed pattern with the PME separated from the strongly recurved ALE and PLE; rarely with eyes continuous, or degenerate to four, two or even none (Song *et al.*, 1999). 14 valid genera and 200 species have been recorded worldwide (Platnick, 2006). To date, only the genus *Leptoneta* has been reported from China. Most of the recorded 19 Chinese species occurs in caves or under leaf litter, showing a strong endemism (Chen, Gao and Zhu, 2000; Chen, Shen and Gao, 1984; Chen and Zhang, 1993; Chen, Zhang and Song, 1982, 1986; Song and Kim, 1991; Song and Xu, 1986; Xu and Song, 1983; Yin *et al.*, 1984; Zhu and Tso, 2002).

The current paper describes and illustrates a new leptonetids genus and species from Northern China (*Rhyssoleoneta latitarsa* gen. nov. et sp. nov.), which was collected in leaf litter in Zanhuang County of Hebei Province. The forest dweller species *R. latitarsa* sp. nov. has distinct shorter legs than those of cave dwelling species, showing an adaptation to epigean environment.

All measurements were measured using an Olympus BX51 compound microscope and given in millimeters. Leg measurements are shown as: total length (femur, patella, tibia, metatarsus, tarsus). Palp measurements are shown as: total length (femur, patella, tibia, -, tarsus). Legs segments were measured on their dorsal side. The following abbreviations are used: ALE, PME, PLE for anterior lateral, posterior median and posterior lateral eyes; AER, PER for anterior and posterior eye rows (composed of ALE and PLE + PME, respectively).

The holotype studied here is deposited in the Institute of Zoology, Chinese Academy of Sciences,

Beijing (IZCAS).

Leptonetidae Simon, 1890

Rhyssoleoneta gen. nov.

Type species. *Rhyssoleoneta latitarsa* sp. nov.

Etymology. The generic name is from Greece, *rhyss* = wrinkle, in reference to the wrinkled prolateral surface of male palpal bulb, combined with the generic name *Leptoneta*, and is feminine in gender.

Diagnosis. The new genus can be distinguished from those of the other genera by the shape of male palpal tarsus, which is relatively wider, with a small projection presented on its dorsal surface, and by the complicated structure of male palpal bulb.

Description. Carapace yellow, nearly as long as abdomen. Cervical grooves and radial furrows light brown, inconspicuous. Fovea dark brown and short needle-shaped. Eyes six. Chelicera light brown, with seven teeth on promargin of fang furrow and three small teeth on retromargin. Sternum shield-shaped. Legs yellow, short. Leg formula: IV- I - II- III. Tibia I with rows of finely hairs on ventral surface. Abdomen pale gray, without distinct patterns on dorsum. Palpal femur without long spines. Palpal tarsus with a short projection on dorsal surface. Bulb complicated, wrinkled on prolateral surface and with rows of teeth-shaped projections on ventral surface.

Distribution. China.

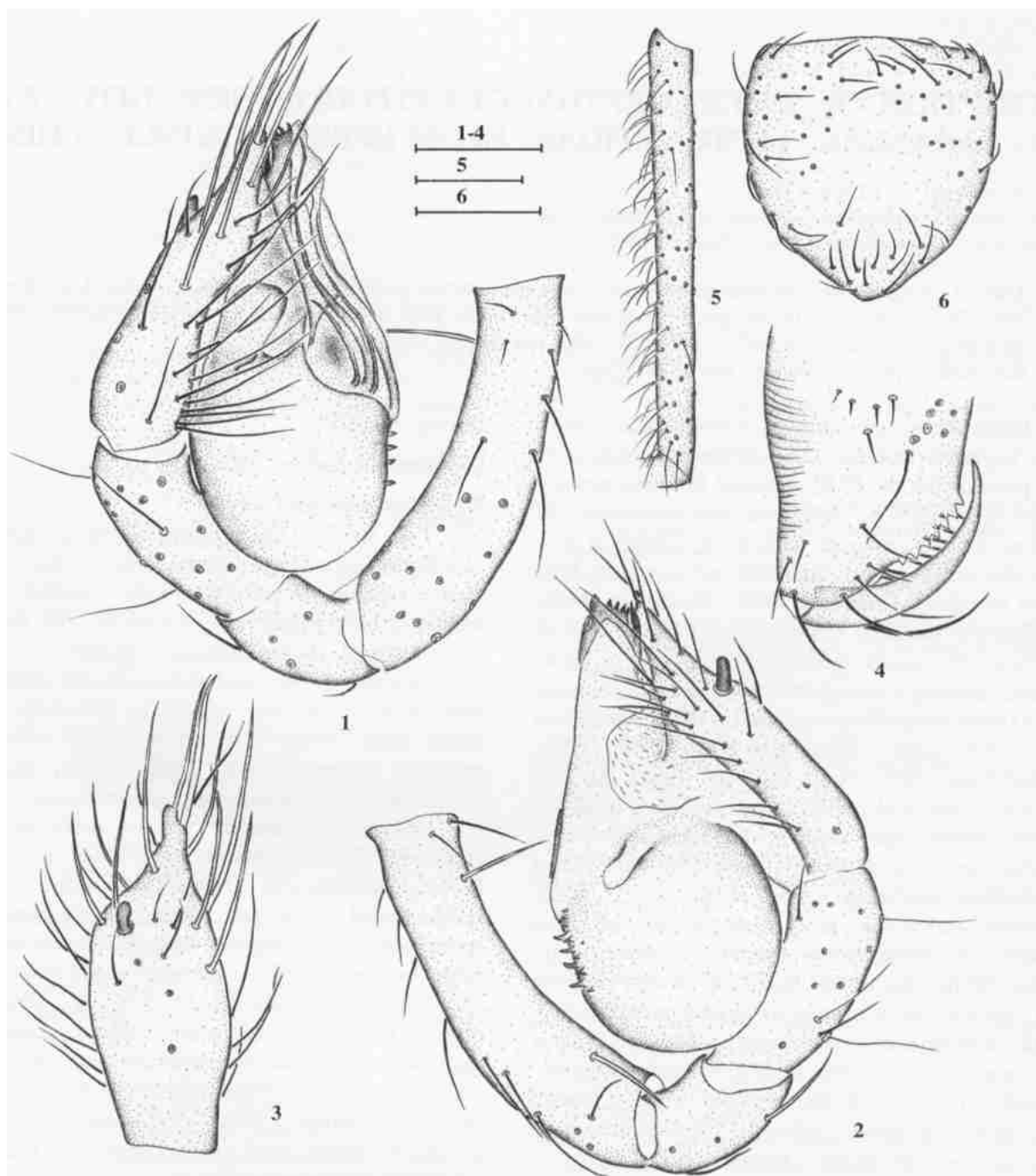
Rhyssoleoneta latitarsa sp. nov. (Figs. 1–6)

Description. Male. Body length 1.35. Carapace 0.68 long, 0.55 wide; abdomen 0.70 long, 0.51 wide. Carapace yellow, hairless. Cervical grooves and radial

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* Corresponding author, E mail: liq@ioz.ac.cn

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Figs 1-6. *Rhyssdepton da latitarsa* sp. nov. 1. Male left palp, prolateral view. 2. *Ditto*, retrolateral view. 3. Male left palpal tarsus, dorsal view. 4. Male chelicera, ventral view. 5. Tibia I of male left leg, anterior view. 6. Male sternum, ventral view. Scale bars: 1-4 = 0.1 mm, 5, 6 = 0.2 mm.

furrows light brown, inconspicuous. Fovea dark brown and short needle-shaped. Clypeus 0.12 high. Eyes six. Eye sizes: ALE 0.06, PLE 0.05, PME 0.04. Distance between eyes: ALE-PME 0.06, PLE-PL 0.06, PLE-PME 0.02. AER 0.10, PER 0.13. Major axes of PLE convergent behind. PME from each other by 0.01. Chelicera light brown, with seven teeth on promargin of fang furrow and three small teeth on retromargin. Endites and labium light brown. Sternum and legs yellow. Measurements of palp and legs: palp 0.95 (0.35, 0.14,

0.18, -, 0.28); I 3.00 (0.84, 0.21, 0.83, 0.63, 0.49); II 2.51 (0.73, 0.21, 0.62, 0.53, 0.42); III 2.17 (0.59, 0.19, 0.52, 0.49, 0.38); IV 3.02 (0.84, 0.20, 0.89, 0.65, 0.44). Leg formula: IV-I-II-III Tibia I with rows of finely hairs on ventral surface. Abdomen haired, pale gray, venter brownish, and oval in shape, no distinct patterns on the dorsum. Palpal femur without long spines. Palpal tibia with three long trichobothria on the dorsal surface and without special projection. Palpal tarsus wide, not branched distally,

with a short projection on dorsal surface. Bulb complicated, wrinkled on prolateral surface and with rows of teeth shaped projections on ventral surface.

Female. Unknown.

Holotype ♂, China, Hebei Province, Shijiazhuang City, Zanhuang County, Zhangshiyan Scenic Area (37.27°N, 114.03°E), 13 Sep. 2005, leg. Ms. WANG Qian, Mr. ZHENG Guo & Ms. SONG Yanying.

Etymology. The specific name is from Latin, “*lati*” = wide, in reference to the wide tarsus of male palp.

Distribution. Only known from type locality.

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中国河北省弱蛛科一新属新种记述 (蜘蛛纲, 蜘蛛目)

修艳丰^{1,2} 李枢强¹

- 1. 中国科学院动物研究所 北京 100080
- 2. 中国科学院研究生院 北京 100039

摘 要 记述了采自于中国河北省赞皇县嶂石岩风景区 (九女峰景区) 的弱蛛科 1 新属新种: 宽跗皱弱蛛 *Rhyssoleptoneta latitarsa* gen. nov. et sp. nov.。皱弱蛛属 *Rhyssoleptoneta* gen. nov.

关键词 蜘蛛, 分类, 新属, 中国.

中图分类号 Q959.226

与该科其它属的主要区别在于雄性触肢跗节较宽, 端部无分叉, 背面具 1 个短小的突起; 雄性触肢生殖球结构复杂等。模式标本保存于中国科学院动物研究所。